



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

648.3539

Job Sheet 214794



Part No: 648.3539

Job Qty: 25 pcs

Part Name: RH Aft Girt Strip



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/2/20

Job Tracking No:

Due Date: 11/25/20

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG 648.3500 REV C IPP REV:A 20.11.02 NEW ISSUE FK VERIFY DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Waterjet - Omax - 1	25 pcs	11/23/20	0.17	2.50	Waterjet - Omax		02/20/11/ole	
						Waterjet - Omax - SCH-S			
110	QC 2	25 pcs	11/23/20	0.00	0.00	QC 2 - 1		02/20/11/ole	
						QC 2 - 12			
						QC 2 - 14			
						QC 2 - 17			
						QC 2 - 19			
						QC 2 - 2			
						QC 2 - 20			
						QC 2 - 22			
						QC 2 - 23			
						QC 2 - 25			
						QC 2 - 32			
						QC 2 - 33			
						QC 2 - 35			
						QC 2 - 39			
						QC 2 - 4			
						QC 2 - 40			
						QC 2 - 44			
						QC 2 - 45			
						QC 2 - 48			
						QC 2 - 49			
						QC 2 - 50			
						QC 2 - 51			
						QC 2 - 52			
						QC 2 - 57			
						QC 2 - 62			
						QC 2 - 63			
						QC 2 - 8			
						QC 2 - 66			
						QC 2 - 64			
							Plex 11/2/20 10:36 AM Dart.lajeunesse.mar		

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					QC 2 - 65	
					QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
					QC 2 - 76	
					QC 2 - 86	
					QC 2 - 83	
112	Small Fab - 2 - B4B	25 pcs	11/23/20	0.00 2.50	Small Fab - 1 - B4B	
					Small Fab - 2 - B4B	
					Small Fab - 3 - B4B	
					Small Fab - 4 - B4B	
					Small Fab - 5 - B4B	
					Small Fab - 6 - B4B	
					Small Fab - 7 - B4B	
					Small Fab - 8 - B4B	
					Small Fab - 9 - B4B	
					Small Fab - Various 1 - B4B	
					Small Fab - SCH-B	
114	QC 5	25 pcs	11/23/20	0.00 0.00	QC 5 - 10	
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
					QC 5 - 82	
					QC 5 - SCH-B	
120	NV5000 - 1 - B4B	25 pcs	11/24/20	1.00 25.00	NV5000 - 1 - B4B	
					NV5000 - 2 - B4B	
130	QC 2	25 pcs	11/24/20	0.00 0.00	QC 2 - 1	
					QC 2 - 12	
					QC 2 - 14	
					QC 2 - 17	
					QC 2 - 19	
					QC 2 - 2	
					QC 2 - 20	
					QC 2 - 22	
					QC 2 - 23	
					QC 2 - 25	
					QC 2 - 32	
					QC 2 - 33	
					QC 2 - 35	
					QC 2 - 39	
					QC 2 - 4	
					QC 2 - 40	

NOT REQUIRED



6003
11/09/2020
See attached
mzt'l certs req'd

DAS
27
9-89

NOV 10 2020

DAS
82
9-89

NOV 09 2020

A/A

20/11/7

deburr & remove sharp edges

A/A

20/11/8

					QC 2 - 44	
					QC 2 - 45	
					QC 2 - 48	
					QC 2 - 49	
					QC 2 - 50	
					QC 2 - 51	
					QC 2 - 52	
					QC 2 - 57	
					QC 2 - 62	
					QC 2 - 63	
					QC 2 - 8	
					QC 2 - 66	
					QC 2 - 64	
					QC 2 - 65	
					QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
					QC 2 - 76	
					QC 2 - 86	
					QC 2 - 83	
140	QC 8	25 pcs	11/24/20	0.00 0.00	QC 8 - 12	
					QC 8 - 14	OK 20/11/09
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	
					QC 8 - 76	
					QC 8 - 61	
					QC 8 - 66	
					QC 8 - 73	
					QC 8 - 82	
142	Small Fab - 2 - B4B	25 pcs	11/25/20	0.00 2.50	Small Fab - 1 - B4B	DAS
					Small Fab - 2 - B4B	58 NOV 09 2020
					Small Fab - 3 - B4B	9.89
					Small Fab - 4 - B4B	
					Small Fab - 5 - B4B	
					Small Fab - 6 - B4B	
					Small Fab - 7 - B4B	
					Small Fab - 8 - B4B	

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				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
160 QC 21 - SA	25 pcs	11/25/20	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	DAS
				QC 21 - SA - 9	21 NOV 10 2020
				QC 21 - SA - 77	9-55
				QC 21 - SA - 28	

Part Op 100 - 1-Cut as per DWG. DWG. Rev: C PROG. Rev: C 2-Deburr if necessary

Descriptions: 110 - QC2- Inspect parts off machine FAI/FAIB
 112 - Mill holes chmfs as per DWG
 120 - 1-Machine as per folio FD413 FOLIO REV: AA DWG REV: C 2-Deburr
 130 - QC2- Inspect parts off machine FAI/FAIB
 140 - QC8- Inspect parts - second check
 142 - Score surface, before applying primer, using 40 GRIT sand paper.
 150 - Identify as per dwg & Stock Location: _____
 160 - QC21- Final Inspection - Work Order Release

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
M301S11GA-H50	301 SS Sheet - 1/2 hard 0.125	4.2250 sf (.169 ea)	100-Waterjet - Omax - 1	S 302475

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Waterjet - Omax - 1	M301S11GA-H50	4	22	0

Part Specifications
Specifications could not be found.

ST644

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DART AEROSPACE LTD		Work Order:	214794
Description: RH Act Girt Strip		Part Number:	648.3539
Inspection Dwg: 648.3500		Rev: C	Page 1 of 1

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.261	$\pm .005$	.2605	1			
.444	$\pm .005$	.445	1			
2.395	$\pm .005$	2.399	1			
6.357	$\pm .005$	6.358	1			
8.336	$\pm .005$	8.337	1			
10.294	$\pm .005$	10.296	1			
.375	$\pm .005$	.378	1			
.402	$\pm .005$	.405	1			
.388	$\pm .005$	.390	1			
.415	$\pm .005$	.418	1			
.396	$\pm .005$	.399	1			
.405	$\pm .005$	.408	1			
.398	$\pm .005$	.401	1			
.407	$\pm .005$	.410	1			
.389	$\pm .005$	.392	1			
.394	$\pm .005$	.396	1			
.381	$\pm .005$	.384	1			
.370	$\pm .005$	.373	1			
.396	$\pm .005$	.398	1			
.377	$\pm .005$	.380	1			
.391	$\pm .005$	.394	1			
.378	$\pm .005$	.380	1			
.375	$\pm .005$	.378	1			
.125	$\pm .005$	.125	1			
4.384	$\pm .005$	4.383	1			

Measured by: <i>a</i>	Checked by: <i>mk</i>	QC Inspector:
Date: 20/11/06	Date: 20/11/09	Date:

Engineering Approval: (If necessary)	Date:
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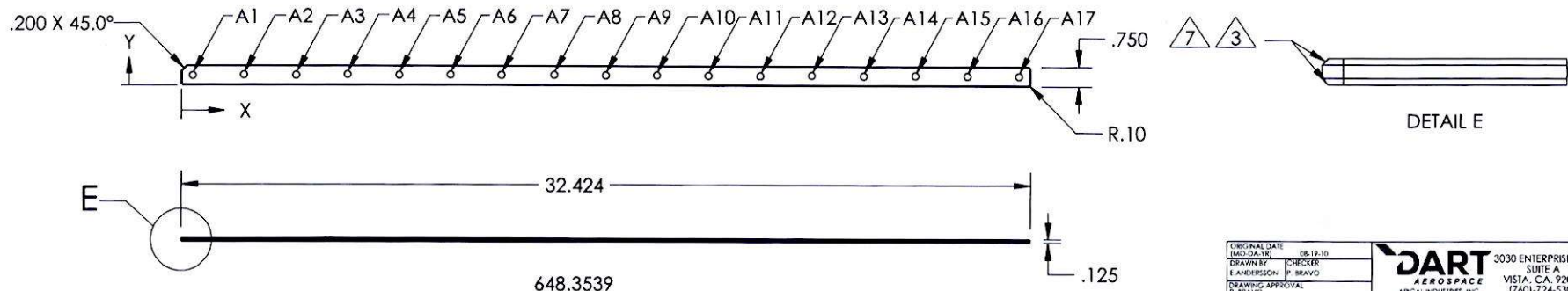
Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

TAG	X LOC	Y LOC	SIZE
A1	.444	.375	Ø .261 THRU ALL
A2	2.398	.402	Ø .261 THRU ALL
A3	4.384	.388	Ø .261 THRU ALL
A4	6.357	.415	Ø .261 THRU ALL
A5	8.336	.396	Ø .261 THRU ALL
A6	10.294	.405	Ø .261 THRU ALL
A7	12.240	.398	Ø .261 THRU ALL
A8	14.250	.407	Ø .261 THRU ALL
A9	16.221	.389	Ø .261 THRU ALL
A10	18.180	.394	Ø .261 THRU ALL
A11	20.145	.381	Ø .261 THRU ALL
A12	22.119	.370	Ø .261 THRU ALL
A13	24.080	.396	Ø .261 THRU ALL
A14	26.064	.377	Ø .261 THRU ALL
A15	28.036	.391	Ø .261 THRU ALL
A16	30.022	.378	Ø .261 THRU ALL
A17	31.980	.375	Ø .261 THRU ALL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 214794 MW
2011-02

648.3539



ORIGINAL DATE 08.19.10		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY P. BRAVO		DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE	
CHECKED BY P. BRAVO		SHEETMETAL	
CONTRACT NO.		SCALE NONE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 4 OF 12	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

ORDER NOTES

FAI measurements required for all parts on this order.

Lines 1-3 are priority.

Ship all lines Fedex Standard Overnight through account 198549495.

****CRITICAL REQUIREMENT TO DEBURR AND REMOVE SHARP EDGES****

Terms & Condition of Purchasing (Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements.

Please visit www.dartaerospace.com for PO Terms & Condition and Quality Clause Standard Requirements for San Diego, CA, AIWI-7.4.1QCS

PO order acknowledgement required.

All items/services subject to our inspection and acceptance.

Packing slip required with each shipment.

Certificate of

Conformity

is required.

Material and Outside Process Certifications required with each shipment

Remit to: DART Aerospace Ltd., 1270 Aberdeen Street, Hawkesbury, Ontario K6A 1K7 Canada

Tel: 613 632 5200

Fax: 613 632 5246

accounting@dartaero.com

GST/HST 10127 2607

Note: A minimum 15% restocking fee is applicable. Custom items are non-refundable. Full warranty details are available at www.dartaerospace.com

International / US Wires:

Swift Code: CHASUS33 Bank Routing #: 021000021 Account #: 133281000

Bank Name: JPMorgan Chase Bank 201 St. Charles Ave., New Orleans, LA USA 70170

Account Name: DART Aerospace Ltd.

Notification October 2018: Our banking information has remained unchanged

Latest Revision Provided Unless Otherwise Requested

Plex 10/30/20 1:32 PM dart.crooks.caitlin



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

ORDER ACKNOWLEDGEMENT

CUSTOMER	ORDER
Customer Code: CAPIC01 Sold To: DART Aerospace Ltd - Vista 3030 Enterprise Court, Suite A Vista, CA 92081 USA Phone: 760-509-1617 Ship To: DART Aerospace Ltd - Vista 3030 Enterprise Court, Suite A Vista, CA 92081 USA Phone: (760) 724-5300	Order No : 30757 Date: 10/29/20 Ship-To Contact: Ernie Navarro Email: enavarro@dartaero.com Cust PO No: POSD004481 FOB: Shipping Point Ship Via: Freight Terms: PrePaid Terms: Net 30 INCO Terms: Ex Works Order Taker: Tori Sera Order Taker Phone: Order Taker Email: tsera@dartaero.com

Line No	Due Date	Ship Date	Part	Description/Note	Quantity	Unit	Price	Unit	Extended Price
1	11/30/20	11/30/20	648.3535	Fwd RH Girt Strip Build per DWGP/N 648.3500Rev C. Adhereto all notes andflag notes onDWG. **CRITICALREQUIREMENTTO DEBURRAND REMOVE SHARPEDGES	50	pcs	\$38.96USD	pcs	\$1,948.10 USD
2	11/30/20	11/30/20	648.3538	Aft Girt Strip Build per DWGP/N 648.3500Rev C. Adhereto all applicablenotes and flagnotes on DWG. **CRITICALREQUIREMENTTO DEBURRAND REMOVE SHARPEDGES**	25	pcs	\$14.62USD	pcs	\$365.41 USD
3	11/30/20	11/30/20	648.3539	RH Aft Girt Strip Build per DWGP/N 648.3500Rev C. Adhereto all applicablenotes and flagnotes on DWG. **CRITICALREQUIREMENTTO DEBURRAND REMOVE SHARPEDGES	25	pcs	\$14.55USD	pcs	\$363.69 USD
4	11/30/20	11/30/20	648.3540	Fwd Girt Strip Build per DG /N648.3500 RevC. Adhere to allapplicable notesand flag noteson DWG. **CRITICALREQUIREMENTTO DEBURRAND REMOVE SHARPEDGES**	100	pcs	\$10.28USD	pcs	\$1,028.10 USD
5	12/7/20	12/7/20	648.3537	Aft RH Girt Strip Build per DWGP/N 648.3500Rev C. Adhereto all applicablenotes and flagnotes on DWG. **CRITICALREQUIREMENTTO DEBURRAND REMOVE SHARPEDGES**	25	pcs	\$10.09USD	pcs	\$252.26 USD
6	12/7/20	12/7/20	648.3536	Mid RH Girt Strip Build per DWGP/N 648.3500Rev C. Adhereto all applicablenotes and flagnotes on DWG. **CRITICALREQUIREMENTTO DEBURRAND REMOVE SHARPEDGES**	20	pcs	\$38.96USD	pcs	\$779.24 USD
7	11/30/20	11/30/20	MISC	MISCELLANEOUS Non RecurringCharge-Programmingfor 648.3537,648.3538,648.3539 &648.3540	4	pcs	\$78.00USD	pcs	\$312.00 USD
8	11/30/20	11/30/20	MISC	MISCELLANEOUS Non-RecurringCharge-Programmingfor 648.3535 &648.3536	2	pcs	\$95.00USD	pcs	\$190.00 USD
Sub Total									\$5,238.80 USD
Grand Total									\$5,238.80 USD

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DART AEROSPACE LTD		Work Order: 214794
Description: RH AFT GIRT STRIP		Part Number: 6483539
Inspection Dwg: 648.3500 Rev: C		Page 1 of 1

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.444	$\pm .005$	.445			Dial ind	NG SWO
2.398	$\pm .005$	2.3996			"	
4.384	$\pm .005$	4.3845			"	
6.357	$\pm .005$	6.3575			"	
8.336	$\pm .005$	8.3365			"	
10.294	$\pm .005$	10.2945			"	
12.240	$\pm .005$	12.2405			"	
14.250	$\pm .005$	14.2505			"	
16.221	$\pm .005$	16.2205			"	
18.180	$\pm .005$	18.178			"	
20.145	$\pm .005$	20.143			"	
22.119	$\pm .005$	22.1175			"	
24.080	$\pm .005$	24.078			"	
26.064	$\pm .005$	26.0615			"	
28.036	$\pm .005$	28.033			"	
30.022	$\pm .005$	30.0195			"	
31.980	$\pm .005$	31.978			"	
.375	$\pm .005$	.373			VERN	ALA-01
.402	$\pm .005$	.400			"	
.388	$\pm .005$	.385			"	
.415	$\pm .005$	.414			"	
.396	$\pm .005$	.396			"	
.405	$\pm .005$	.403			"	
.398	$\pm .005$	.398			"	
.407	$\pm .005$	.406			"	
.389	$\pm .005$	.388			"	
.394	$\pm .005$	.392			"	
.381	$\pm .005$	.378			"	
.370	$\pm .005$	.368			"	
.396	$\pm .005$	.394			"	
.377	$\pm .005$	.375			"	
.391	$\pm .005$	.388			"	

Measured by: ALA	Checked by: MK	QC Inspector:
Date: 20/11/7	Date: 20/11/09	Date:

Engineering Approval: (If necessary)	Date:
--	--------------

Rev	Date	Change	Revised by	Approved
B	14.07.31	New Issue	KJ	



Container No: S311558



Part: 648.3539

Job No: 214794

Serial No/Batch: S311558

Revision: REV.C

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL : 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 11/08/20

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION: PR27		N/C
N/C	INITIAL RELEASE	06-15-16	P. BRAVO
A	INCORPORATED ECN 05570	09-06-16	P. BRAVO
B	INCORPORATED ECN 05887	02-03-18	P. BRAVO
C	INCORPORATED ECN 06453	02-24-20	J. GARDNER

NOTES: UNLESS OTHERWISE SPECIFIED

1. DELETED
2. IDENTIFY IAW MPP-120
3. DEBURR AND BREAK ALL SHARP EDGES.
45° CHAMFER .015" TO .030" AROUND PART EXTERIOR EDGE
4. FINISH: BRUSHED
5. FINISH: IAW MPP-172 PRIMER IAW SECTION 4.2
6. DEBURR AND BREAK ALL SHARP EDGES.
45° CHAMFER .005" TO .010" AROUND PART EXTERIOR EDGE
7. 100% LOT INSPECTION, CRITICAL FEATURE
8. INSTALL F/N 17, JOINING F/N 13 OR 14 WITH F/N 5 IAW NAS10997AD3-5 SPECIFICATIONS
9. MASK INSIDE OF F/N 5 BEFORE APPLYING PRIMER.
10. MATERIAL: HALF HARD 301 STAINLESS STEEL PER AMS 5518. ✓
11. SCORE SURFACE, BEFORE APPLYING PRIMER, USING 40 GRIT SAND PAPER
12. PRIMER FINISH: PC 4426, VENDOR: ROYAL ADHESIVES & SEALANTS
13. DIMENSIONS FOR FLAT PATTERN DRIVEN BY .DXF FILE
14. MATERIAL: P/N 600.0025, SEE SPEC AMS-021 REV B
15. MATERIAL: 316 STAINLESS STEEL PER AMS 5524
16. MATERIAL: 304 STAINLESS STEEL IAW 5640, 0.016" THICKNESS

		19	648.3548	DOOR PIN GUARD	△	
		18	648.3547	DOOR PIN GUARD	△	
12	12	17	601.3200	REDUCED CSK RIVET		NAS1097AD3-5
		16	648.3544	DOUBLER RUB STRIP	△	△
		15	348.3543	DOUBLER RUB STRIP	△	△
1		14	648.3542	RESERVOIR BRACKET DOUBLER	△	
	1	13	648.3541	RESERVOIR BRACKET DOUBLER	△	
		12	648.3540	FWD GIRT STRIP	△	△ △
		11	648.3539	AFT FLT RH GIRT STRIP	△	△ △
		10	648.3538	AFT FLT LH GIRT STRIP	△	△ △
		9	648.3537	AFT RH GIRT STRIP	△	△ △
		8	648.3536	MID RH GIRT STRIP	△	△ △
		7	648.3546	GIRT BACKING STRIP	△	△ △
		6	648.3545	GIRT BASE STRIP	△	△ △
6	6	5	651.0601	BUSHING ASSY		
		4	648.3535	FWD RH GIRT STRIP	△	△ △
		3	648.3534	AFT LH GIRT STRIP	△	△ △
		2	648.3533	MID LH GIRT STRIP	△	△ △
		1	648.3532	FWD LH GIRT STRIP	△	△ △
X	X	X	648.3506	BOTTOM AFT DOUBLER ASSY		△ △
	X	X	648.3505	TOP FWD DOUBLER ASSY		△ △
3506	.3505					
QTY		FIND #	PART #	DESCRIPTION	MATL	SPEC.

PARTS LIST			
NEXT ASSY (S)	ORIGINAL DATE (MM-DD-YY)	06-15-16	
648.3300	DRAWN BY E ANDERSON	CHECKED P. BRAVO	
	DRAWING APPROVAL P. BRAVO		
	CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .010 3 PLACE DECIMALS ± .003 ANGLES ± .5°			
DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5300			
SHEETMETAL			
SRE	CAGE CODE	DWG NO.	REV.
B	07M26	648.3500	C
SCALE: NONE		SHEET 1 OF 12	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M301S11GA

PO / BATCH NO.: POHB047051

DATE: SEP 23 2020

S 302475

MATERIAL CERT REC'D: YES

THICKNESS ORDERED: .125

QUANTITY RECEIVED: 30SF

THICKNESS RECEIVED: .125

QUANTITY INSPECTED: 30SF

SHEET SIZE ORDERED: 3'x10'

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: 3'x10'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	AMS 5518 / ASTM A666
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HIT 7592253
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> DATE: <u>SEP 23 2020</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 301 SS SHEET

SPECIFICATION: SEE MATERIAL CONDITION TABLE

FINISH: UNPOLISHED NO. 2B

PART NUMBER: M301S1TT (GA-HH)
GA

WHERE "TT" = GAUGE THICKNESS
WHERE "HH" = MATERIAL CONDITION (SEE MATERIAL CONDITION TABLE)

EQ. 16 GAUGE SS SHEET 2B FINISH 1/4 HARD MINIMUM = M301S16GA
EQ. 19 GAUGE SS SHEET 2B FINISH 1/2 HARD = M301S19GA-H60

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK (IN)	THICKNESS RANGE (IN)
20	0.01875	0.0178 - 0.019
22	0.021875	0.0209 - 0.023
24	0.025	0.024 - 0.026
26	0.028125	0.027 - 0.029
28	0.03125	0.030 - 0.032
30	0.034375	0.033 - 0.035
32	0.0375	0.036 - 0.038
34	0.040625	0.039 - 0.041
36	0.04375	0.042 - 0.044
38	0.046875	0.045 - 0.047
40	0.05	0.049 - 0.051
42	0.053125	0.052 - 0.054
44	0.05625	0.055 - 0.057
46	0.059375	0.058 - 0.06
48	0.0625	0.061 - 0.063
50	0.065625	0.064 - 0.066
52	0.06875	0.067 - 0.069
54	0.071875	0.070 - 0.072
56	0.075	0.073 - 0.076
58	0.078125	0.076 - 0.079
60	0.08125	0.079 - 0.082
62	0.084375	0.082 - 0.085
64	0.0875	0.085 - 0.088
66	0.090625	0.088 - 0.091
68	0.09375	0.091 - 0.094
70	0.096875	0.094 - 0.097
72	0.1	0.097 - 0.101
74	0.103125	0.101 - 0.105
76	0.10625	0.104 - 0.108
78	0.109375	0.107 - 0.111
80	0.1125	0.11 - 0.114
82	0.115625	0.113 - 0.116
84	0.11875	0.116 - 0.119
86	0.121875	0.119 - 0.122
88	0.125	0.122 - 0.125
90	0.128125	0.125 - 0.128
92	0.13125	0.128 - 0.131
94	0.134375	0.131 - 0.134
96	0.1375	0.134 - 0.137
98	0.140625	0.137 - 0.14
100	0.14375	0.14 - 0.143

MATERIAL CONDITION TABLE:

CODE	CONDITION	SPECIFICATION	MIN YIELD TENSILE (KSI)	MIN ULTIMATE TENSILE (KSI)
(OMITTED)	MIN 1/4 HARD	AMS 5517/5518/5519 OR ASTM A301	75	125
H0	ANNEALED	AMS 5501 OR ASTM A301	30	75
H25	1/4 HARD	AMS 5517 OR ASTM A301	75	125
H50	1/2 HARD	AMS 5518 OR ASTM A301	110	160
H75	3/4 HARD	AMS 5519 OR ASTM A301	135	175
H100	FULL HARD	AMS 5519 OR ASTM A301	140	180

NOTES: COMPRESSIVE STRENGTH VARIES SIGNIFICANTLY DEPENDING ON GRAIN DIRECTION. CARE IS REQUIRED FOR USE IN COMPRESSIVE LOAD APPLICATIONS. DESIGN VALUES ARE LOWER THAN SPECIFICATION MINIMUMS. REFER TO MIPRDS.

PREPARED BY: [Signature]
DATE: 19.03.01

APPROVED

REV.	DESCRIPTION	DATE
1	ADDED MATERIAL CONDITION TABLE USED MIN 1/4 HARD WHEN OMITTED SUCH AS NOT TO AFFECT EXISTING PARTS	19.03.01
2	NEW ISSUE	10.11.08

DESIGN: [Blank]
CHECKED: [Blank]
MFG. APPR.: [Blank]
APPROVED: [Blank]
DATE: 19.03.01

COMPANY: DART AEROSPACE LTD
HAWESBURY, ONTARIO, CANADA

REV. B
SHEET 1 OF 1
SCALE: NTS



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 03402278 FROM: CINC PAGE 1

CUST NUMBER: 1203820 NET WGT: 156.000 REQ. DATE: 09/21/20 CONFIRMED
 SOLD TO: SHIP TO:
 DART AEROSPACE LTD DART AEROSPACE LTD
 1270 ABERDEEN ST 1270 ABERDEEN ST
 HAWKESBURY ON HAWKESBURY ON
 CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 09/16/20
 TERMS: NET 30 DAYS VIA: COMMON CARRIER
 F.O.B.: SHIPPING POINT FREIGHT: PREPAID
 CUST ORD NO.: POHB047051 RELEASE NO.:
 RECEIVING PHONE:

LINE	ITEM DESCRIPTION	WIDTH	LENGTH
0001 31548 301	1/2 HARD SHEET .125	36	120 IN

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	30.000 SFT	30.000 SFT	156.000 LB	156.000	1

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 2B999.0 Export License: NLR Expiration Date: 0/00/00
 PO: 49426595 HT: 7592253 PC: 1 CUSTOMER QTY: 30.000 UOM SFT
 MLT: UNITED STATES MFG: UNITED STATES SLB/CL: ID# 72994103

BROKERS LIVINGSTON INTERNATIONAL

AREA		TYPE OF PKG	PKGS	GRS WEIGHT	WIDTH	LENGTH	HGHT
BAY 2	SKIDS		1.000	245.000	40.0000	124.0000	7
					CUBIC FT 20.0926		

BY: LES
 RT 000-

DAS
 82
 9-89

1.000 245.000

UNLOAD TYPE: NONE SPECIFIED

RECEIVED

SEP 23 2020

DART AEROSPACE LTD.

DATE SHIPPED _____

1 PO:



POHB047051

DATE FILLED _____

THANK YOU FOR THIS ORDER

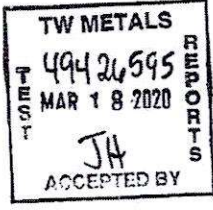
TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
 PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
 REVIEW.
<http://www.twmetals.com/invoice-terms.html>

United Performance Metals

Paul Isaacs
Paul Isaacs
Quality Associate

Customer Name: TW Metals - Exton
Customer PO: M49426595
UPM Sales Order: 755822
Date: 3/17/2020
Description/Form: STAINLESS 301 1/2 HARD - SHEET
Heat Number: 7592253 Ingot: 19L00356506

Width: 36.0000 Length: 120.0000
Size: .1250
Customer P/N:
Packing List Number: 143346-1
Quantity: 1092 LB 7 pc.

		AK Steel Corporation Metallurgical Test Report Coshocton Works 17400 State Route 16 Coshocton, OH 43812 U.S.A.		Page 2							
		Load No. 5391843 Srm No. 5391843									
C U S T O M E R	UNITED PERFORMANCE METALS INC 3475 SYMMES RD HAMILTON, OH 45015	S H I P T O	UNITED PERFORMANCE METALS O'NEAL PERFORMANCE METALS METAL PROCESSING DIVISION 3475 SYMMES ROAD HAMILTON, OH 45015	MILL ORDER NO. 271940-3395 PART NO.	PROCESSOR ORDER NO. CIN-35836-P14						
	BUYERS ORDER NO. CIN-35836-P14										
ENGLISH UNITS --PRODUCT-- METRIC UNITS .1250 NOM 36.0000 X 120.0000											
SHIPPING DATE: 10/25/2019											
REMARKS THIS MATERIAL WAS MELTED AND MANUFACTURED IN THE U.S.A. (DFARS 252.225.7001, 7008 & 7009 COMPLIANT). NO INTENTIONAL ADDITIONS OF MERCURY OR MERCURY COMPOUNDS, RADIUM, ALPHA SOURCE, AND LOW MELTING ALLOYS OR ELEMENTS CAPABLE OF FORMING LOW MELTING ALLOYS WERE MADE THROUGHOUT THE PROCESSING OF THIS MATERIAL. COILED PRODUCTS CONTAIN NO WELDS STEELMAKING PROCESS - EAF MELTED, AOD REFINED, CONTINUOUS CAST SLABS STAINLESS STEELS SUPPLIED BY AK STEEL CORPORATION COMPLY WITH THE EUROPEAN END -OF-LIFE VEHICLE DIRECTIVE 2000/53/EC (ELVD) AND THE RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE KNOWN AS EU-DIRECTIVE 2011/65/EU, EFFECTIVE JANUARY 3, 2013 (ROHS 2) RESIDUAL LEVELS OF Hg, Pb, Cd, & HEXAVALENT CHROMIUM ARE WITHIN ACCEPTABLE LIMITS ACCORDING TO THESE DIRECTIVES. AK STEEL HAS IMPLEMENTED, OPERATES AND MAINTAINS A QUALITY MANAGEMENT SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF THE PRESSURE EQUIPMENT DIRECTIVE (PED) 97/23/EC 7/2, ANNEX I, PARAGRAPH 4.3. MATERIAL SUPPLIED IN ACCORDANCE WITH EN 10204:2004 TYPE 3.1 UPM-QRS-001 REV. B, EXCEPTIONS DATED AND APPROVED ON 02/22/2018.											
PRODUCT DESCRIPTION CR SHT TYPE 301 STAINLESS NI 7.0% MIN TR FINISH 1/2 HARD SLIT EDGE * ASTM A 240-16 UNS S30100 CHEMISTRY ONLY * ASME SA-240 SECT ION II PART A 2017 EDITION CHEMISTRY ONLY * ASME SA-666 SECTION II PART A 2017 EDITION * ASTM F 899-12B (UNS S30100 TYPE 301) * AMS 5518M * ASTM A 666-15 * MIL-S-5059 D-AMEND-3 CANCELED * QQ-S-766-D (CANCELED) * UNS-S30100 13TH EDITION * UPM-301-1/2HD 06-04-08											
PARENT LIFT	POS	DIR	COND	% ELONG	ELONG METHOD	ELONG GAUGE LENGTH	TENSILE STRENGTH (KSI)	Y.S. .2% OFFSET (KSI)	ROCKWELL HARDNESS Tail	ROCKWELL HARDNESS Front	
ID		(L, T, D)									
729941-03	T	T	A.S.T.M	193	MEASURED	2 Inch	167.6	130.4	C 36	C 35	
											
*** CONTINUED ON NEXT PAGE ***											

DAS
82
9-89